LIST OF U.S. CUSTOMS LABORATORY METHODS

USCL NUMBER	METHOD	TITLE
50-01	AATCC 20 NHM - 1990	Fiber Analysis: Qualitative
50-02	ASTM D 629 NHM - 1995	Test Methods for Quantitative Analysis of Textiles
50-03	AATCC 20A NHM - 1990	Fiber Analysis: Quantitative Analysis
50-04	ASTM D 123 NHM - 1996a	Terminology Relating to Textiles
50-05	ISO 1833 NHM - 1977	Textiles-Binary Fiber Mixtures - Quantitative Chemical Analysis
50-06	AATCC 94	Finished Textiles: Identification
50-07	ASTM D 276	Test Methods for Identification of Fibers in Textiles
50-08	ASTM D 5103	Test Method for Length and Length Distribution of Man-Made Staple Fibers (Single-Fiber Test)
50-09	ASTM E 168	Practices for General Techniques of Infrared Quantitative Analysis

USCL NUMBER	METHOD	TITLE
50-10	ASTM E 334	Practice for General Techniques of Infrared Microanalysis
50-11	ASTM E 1252	Practice for General Techniques for Qualitative Infrared Analysis
50-12	USCL Manual	Federal Trade Commission - Rules and Regulations Under the Textile Fiber Products Identification Act
50-13	ASTM D 3774	Test Methods for Width of Woven Fabric
50-14	ASTM D 3775 NHM - 1990	Test Method for Fabric Count of Woven Fabric
50-15	ASTM D 579	Specifications for Greige Woven Glass Fabrics [for weave-type]
50-16	ASTM D 4029	Specification for Finished Woven Glass Fabrics [for weave-type]
50-17	USCL Manual	Textiles - Weave Type Determination for Section XI Harmonized Tariff Schedule of the United States
50-18	USCL Manual	Textiles - Methods and Procedures for the Analysis of Silk
50-	ISO 2076 - 1989 NHM - 1989	Textiles - Man-made Fibres - Generic Names

USCL NUMBER	METHOD	TITLE
50-	ISO 6938 - 1984	Textiles - Natural Fibres - Generic
	NHM - 1984	Names and Definitions
50-	ISO 3572 - 1976	Textiles - Weaves - Definitions of General
	NHM - 1976	Terms and Basic Weaves
50-	ISO 2947 - 1973	Textiles - Integrated Conversion Table for
	NHM - 1973	Replacing Traditional Yarn Numbers by Rounded Values in the Tex System
50-	ISO 139 - 1973	Textiles - Standard Atmospheres for
	NHM - 1973	Conditioning and Testing
50-	ISO 5089 - 1977	Textiles - Preparation of Laboratory
	NHM - 1977	Test Samples and Test Specimens for Chemical Testing
50-	ISO/TR 5090 - 1977	Textiles - Methods for the Removal
	NHM - 1977	of Non-fibrous Matter Prior to Quantitative Analysis of Fibre Mixtures
50-	ISO 5088 - 1976	Textiles - Ternary Fibre Mixtures -
	NHM - 1976	Quantitative Analysis
50-	ISO 1144 - 1973	Textiles - Universal System for Designating
	NHM - 1973	Linear Density (Tex System)
50-	ASTM D 2497 - 1995	Tolerance for Man-Made, Organic-Base
	NHM - 1995	Filament Single Yarns

USCL NUMBER	METHOD	TITLE
50-	ASTM D 861 - 1995	Practice for Use of the Tex System to
	NHM - 1995	Designate Linear Density of Fibers, Yarn Intermediates and Yarns
50-	ISO 1973 -1976	Textiles - Determination of Linear Density
	NHM - 1976	of Fibres - Gravimetric Method
50-	ISO 2060 - 1994	Textiles - Yarn from Packages -
	NHM - 1994	Determination of Linear Density (mass per unit length) by the Skein Method
50-	ISO 2062 - 1993	Textiles - Yarn From Packages -
	NHM - 1993	Determination of Single-End Breaking Force and Elongation at Break
50-	ISO 5079 - 1977	Textiles - Man-Made Fibres -
	NHM - 1977	Determination of Breaking Strength and Elongation of Individual Fibres
50-	ASTM D 3822 - 1995	Test Method for Tensile Properties
	NHM - 1995	of Single Textile Fibres
50-	ASTM D 2101 - 1995	Test Method for Tensile Properties of
	NHM - 1995	Single Man-Made Textile Fibres Taken From Yarns and Tows
50-	ISO 3932 - 1976	Textiles - Woven Fabrics - Measurement of
	NHM - 1976	Width of Pieces
50-	ASTM D 3774 - 1989	Test Methods for Width of Woven
	NHM - 1989	Fabric

USCL NUMBER	METHOD	TITLE
50-	ISO 3933 - 1976 NHM - 1976	Textiles - Woven Fabrics - Measurement of Length in Pieces
50-	ISO 3801 - 1977 NHM - 1977	Textiles - Woven Fabrics - Determination of Mass per Unit Length and Mass per Unit Area
50-	ISO 7211-2 - 1984 NHM - 1984	Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 2: Determination of Number of Threads per Unit Length
50-	ISO 7211-6 - 1984 NHM - 1984	Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 6: Determination of the Mass of Warp and Weft per Unit Area of Fabric
50-	ISO 7211-1 - 1984 NHM - 1984	Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 1: Methods for the Presentation of a Weave Diagram and Plans for Drafting, Denting and Lifting

USCL METHOD 50-01

Index

AATCC 20
Fiber Analysis: Qualitative

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The method specifies the procedure for determining the identity of textile fibers by microscopic, physical and chemical means.

This method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

AATCC 20
Fiber Analysis: Qualitative

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-02 Index

ASTM D 629
Test Methods for Quantiative Analysis of Textiles

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The method specifies the determination of the quantities of textile fibers in blended materials by chemical, physical and microscopic means.

This method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ASTM D 629
Test Methods for Quantitative Analysis of Textiles

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-03

Index

AATCC 20A
Fiber Analysis: Quantiative Analysis

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The method specifies the determination of the quantities of textile fibers in blended materials by chemical, physical and microscopic means.

This method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

AATCC 20A
Fiber Analysis: Quantitative **Analysis**

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-04

Index

ASTM D 123
Terminology Relating to Textiles

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method defines terminology and references test methods as applicable to textile industry. It is suitable for determining terminology used in the Explanatory Notes, Head Notes, Chapter Notes and article descriptions found in the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ASTM D 123
Terminology Relating to Textiles

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-05

Index

ISO 1833
Textiles - Binary Fiber Mixtures- Quantitative Chemical Analysis

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The method specifies the procedure for determining the quantities of textile fibers in binary fiber mixtures by chemical means.

This method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 1833
Textiles - Binary Fiber Mixtures - Quantitative Chemical Analysis

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-06

Index

AATCC 94
Finished Textiles: Identification

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method provides guidelines for the qualitative identification of textile finishes by chemical and/or instrumental methods.

These guidelines can be applied to textile products such as water resistance apparel and finished textiles requiring quantitative analysis.

2 REFERENCES

AATCC 94
Finished Textiles: Identification

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-07

Index

ASTM D 276
Test Methods for Identification of Fibers in Textiles

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method specifies the procedures for determining the identity of textile fibers by physical, chemical, instrumental and microscopical means.

This method is suitable for Section XI and Chapters 64, 65 and 67 of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ASTM D 276
Test Methods for Identification of Fibers in Textiles

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-08

Index

ASTM D 5103
Test Methods for Length and Length Distribution of Man-Made Staple Fibers (Single-Fiber Test)

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method specifies the procedure for determining staple length and length distribution of man-made staple fibers from fibers, yarns and woven fabrics.

The method is suitable for Chapter 55 of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ASTM D 5103
Test Methods for Length and Length Distribution of Man-Made Staple Fibers (Single-Fiber Test)

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-09

Index

ASTM E 168
Practices for General Techniques of Infrared Quantitative Analysis

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

These practices cover the techniques most often used in infrared quantitative analysis. Practices associated with the collection and analysis of data on a computer are included as well as practices that do not use a computer. These practices include, *inter alia,* baseline procedures for computerized instruments, sample preparation (including polymers), statistics, and setting up an analytical procedure.

This procedure should prove useful in the determination of the composition of copolymers, especially those which are not amenable to NMR techniques because of solubility problems.

2 REFERENCES

ASTM E 168
Practices for General Techniques of Infrared Quantitative Analysis

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-10

Index

ASTM E 334
Practices for General Techniques of Infrared Microanalysis

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This practice covers techniques that are of general use in securing and analyzing microgram quantities of samples by infrared spectrophotometric techniques. This practice includes, *inter alia*, discussion of the use of micro cells, analysis of gas and liquid chromatography fractions, as well as the use of an IR microscope.

This practice should be useful when encountering small amounts of material that occur in mixtures of organic compounds.

2 REFERENCES

ASTM E 334
Practices for General Techniques of Infrared Microanalysis

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-11 Index

ASTM E 1252
Practices for General Techniques for Qualitative Infrared Analysis

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This practice covers the spectral range from 4000 to 50 wavenumbers and includes techniques that are useful for qualitative analysis of liquid-, solid-, and vapor-phase samples by infrared spectrophotometric techniques for which the amount of sample available for analysis in not a limiting factor. This method includes, *inter alia,* procedures for processing polymers (with a chart of polymer solubilities).

This method describes basic techniques for sample handling that should prove useful for any type of substance encountered.

2 REFERENCES

ASTM E 1252
for Qualitative Infrared Analysis

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-12 INDEX

Federal Trade Commission
Rules and Regulations Under the Textile Fiber and Products Identification Act

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The rules and regulations under the Textile Fiber Products Identification Act are cited to provide guidance in the labeling and marking of textiles.

2 REFERENCES

Rules and Regulations Under the Textile Fiber Products Identification Act
16 CFR 303

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-13 Index

ASTM D 3774
Test Methods for Width of Woven Fabric

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

Practices for General Techniques

1 SCOPE AND FIELD OF APPLICATION

The width of a woven fabric is required for classification in Chapters 50, 51, 52, 53, 54, 55, 58 and 59 of the Harmonized Tariff Schedule of the United State (HTSUS).

This method is one which can be used to determine the width of woven fabric.

2 REFERENCES

ASTM D 3774
Test Methods for Width of Woven Fabric

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-14 Index

ASTM D 3775
Test Methods forFabric Count of Woven Fabric

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method provides procedure for counting the number of warp yarns (ends) and filling yarns (picks) per unit distance.

This method is suitable for Chapters 50, 52, 53, 54 and 55 of the Harmonized Tariff Schedule

2 REFERENCES

ASTM D 3775
Test Methods for Fabric Count of Woven Fabric

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-15 Index

ASTM D 579
Specification of Greige Woven Glass Fabrics [for weave-type]

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method covers designations of fabric types and weave construction of greige woven glass fabric. This method is suitable for Chapter 70 of the Harmonized Tariff Schedule of the United State (HTSUS).

The basic weave diagrams depicted in the ANNEX of this method are suitable for comparison to woven fabrics classifiable in Section XI.

2 REFERENCES

ASTM D 579
Specificationhs for Greige Woven Glass Fabrics [for weave-type**]**

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-16

Index

ASTM D 4029
Specification of Finished Woven Glass Fabrics [for weave-type]

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method covers designations of fabric types and weave construction of finished woven glass fabric. This method is suitable for Chapter 70 of the Harmonized Tariff Schedule of the United State (HTSUS).

The basic weave diagrams depicted in the ANNEX of this method are suitable for comparison to woven fabrics classifiable in Section

2 REFERENCES

ASTM D 4029
Specifications for Finished Woven Glass Fabrics [for weave-type]

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-17 INDEX

Textiles - Weave Type Determination for Section XI Harmonized Tariff Schedule of the United States

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

0 INTRODUCTION

For proper classification of woven fabrics it is necessary to determine the type of weave. It is necessary to distinguish between jacquard woven fabrics and other types of "fancy" woven fabrics.

1 SCOPE AND FIELD OF APPLICATION

This method defines preparation and procedure for the plotting of weave construction in woven fabrics. For the definition of the types of weaves other than dobby and jacquard, refer to the section and chapter notes in Section XI HTSUS and the Explanatory Notes to the HTS .

2 REFERENCES

Harmonized Tariff Schedule of the United States *(HTSUS)*
Section XI and
Chapter 50 to Chapter 55

ISO 7211.1
Textiles - Woven fabrics - construction - Methods of analysis - Part 1: Methods for the presentation of weave diagrams and plans

ISO 3572
Textiles - Weaves - Definitions of general terms and basic weaves

ASTM D 123
Terminology Relating to Textiles

3 GENERAL

While this method can be performed by one person, it is strongly recommended to do this test as a team of two people; one to look at the fabric and call out what is being seen and one to record what is said on the graph paper.

If doing it unassisted is the only recourse, use a tape recorder to record your verbiage and then transpose it onto the graph paper. (See Analytical Methods for a Textile Laboratory, American Association of Textile Chemists and Colorists for additional information.)

4 PRINCIPLE

The weave is plotted and the plot examined for determination of weave type and harness count.

5 APPARATUS AND MATERIALS

5.1 Graph paper, 8 X 8 squares per inch is preferred but 6 X 6 or 10 X 10 can also be used.

5.2 Pick glass (2.5 sq. cm. magnifying glass)

5.3 Pick needle (dissecting needle)

5.4 Scissors

5.5 Tweezers

5.6 Sharp pencil

6 PREPARATION OF THE SAMPLE

6.1 The size of the sample shall be not less than 15 cm. X 15 cm. with all warp and filling yarns at right angles to one another and flat (no wrinkles present). If the fabric has a figured design, a piece having more than two complete repeats in both warp and filling directions is necessary.

6.2 Mark the fabric as to which are the warp yarns. If the selvage (which is parallel to the warp) is not obvious, the following guidelines may help establish the warp direction.

6.2.1 If the sample has stripes in it, they are usually in the warp.

6.2.2 If the sample has plied yarns running in one direction and single yarns running the other directions, the plied yarns usually are in the warp.

6.2.3 The warp usually has more yarns per inch.

6.2.4 Usually the warp threads are straighter and more tightly drawn than the filling yarns.

6.2.5 Usually the warp yarn is of a finer number than the filling yarn.

6.2.6 If the sample has sized or starched yarns running in only one direction, usually they are in the warp.

6.2.7 If reed marks are present, they are always in the warp direction.

6.2.8 If bowing appears, it is usually in the filling direction.

7 PREPARATION OF THE GRAPH

7.1 In the upper left hand corner of the paper, leaving a one inch border long the top and left side of the paper, darken a line of the graph paper in each direction. [1]

7.2 In that border area, make a key for easy reference: an "**X**" in a box means a "*raiser*" or that a particular warp yarn is over the corresponding filling yarn and if the square is not marked, it is called a "*sinker*" and indicates that a particular warp yarn is under that corresponding filling yarn.

7.3 Let the vertical columns represent each warp yarn in order and the horizontal rows represent each filling yarn in order.

8 Procedure

8.1 Plotting the weave

8.1.1 Lay the sample out on a hard surface with the warp yarns extending away from the analyst. Withdraw a sufficient number of warp and filling yarns to produce a fringe for isolating individual yarns and signifying a starting point.

8.1.2 With a pick needle, slightly move the next filling yarn from the body of the fabric without disturbing the position of the warp yarns.

8.1.3 Place the pick glass in position at the point where the first warp end and the moved filling yarn

[1] If the weave is plotted along the warp yarns from bottom to top rather than along the filling yarns, the borders would be at the left side of the warp yarns and at the bottom of the filling yarns.

are visible. [2]

8.1.4 Following along the filling yarn with the pick needle, observe and tell the recording person whether the first warp yarn floats over or under the moved filling yarn. Be sure to "**X**" the appropriate box.

8.1.5 After charting the interlacing of the first filling yarn on the graph paper, check for errors. Have the person with the graph paper repeat what he or she has recorded while the analyst with the fabric follows along on the thread to confirm the record.

8.1.6 Repeat **8.1.4** and **8.1.5** until two complete repeats of warp and filling yarns have been completed.

8.2 Determining the number of harnesses

8.2.1 Examine the column representing the first warp yarn and note its interlacing with each pick.

8.2.2 Draw a vertical line from the first warp yarn to a base line below the design and mark this base line "harness number 1." (See Figure 1)

8.2.3 Examine the interlacing of the second warp yarn with each pick. If the interlacings are different from the first warp interlacings, extend a vertical line from the second warp yarn to a second base line marked "harness number 2."

8.2.4 Complete the examination of the rest of the warp yarns of the repeat, in order, and extend lines from each warp to a base line below. If the interlacings are different from those of any warp previously examined, add another base line and harness number.

8.2.5 If the interlacings correspond to those of any previous warp, number it the same as the corresponding warp base line. Each base line corresponds to a different harness and the total number of such lines represents the number of harnesses used to make the cloth.

9 Results

If the number of harnesses used exceeds 32, it is generally accepted that the fabric has been made on a

[2] A low power microscope or a pick counter with a traveling needle may also be used.

jacquard loom. [3] Jacquard weaves are usually intricate figures while dobby weaves are of a smaller geometric design.[4]

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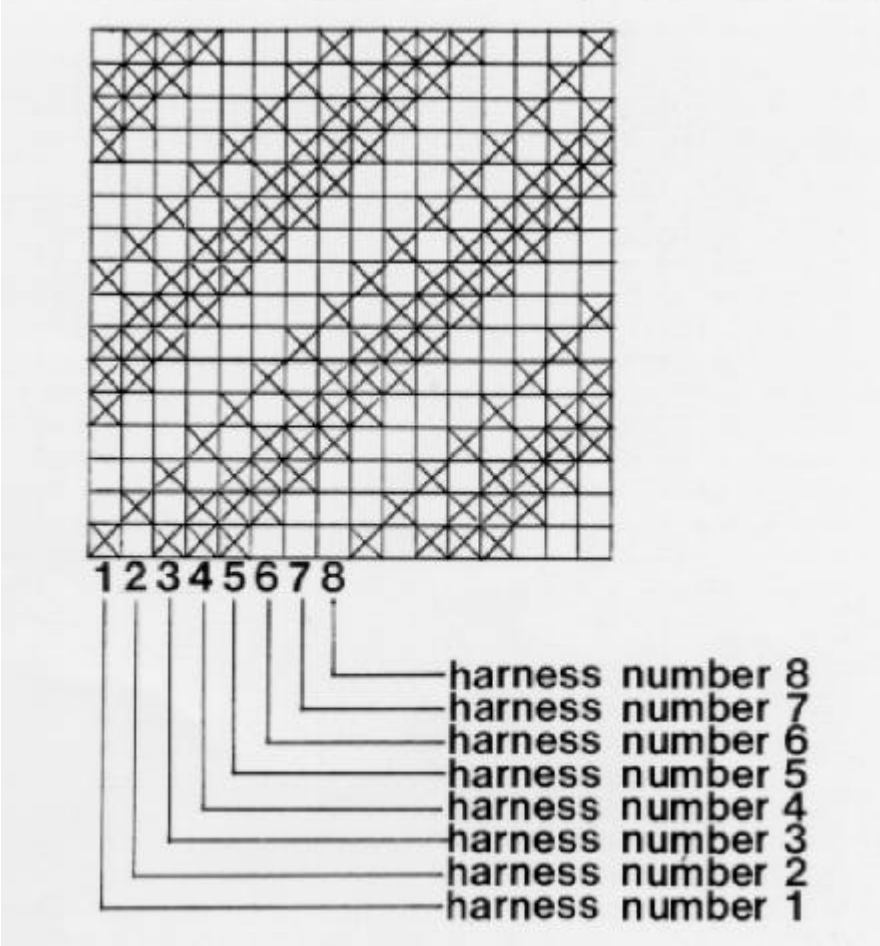
[3] Joseph, Marjory L., Introductory Textile Science, 1986, p.227.

[4] Linton, George E., The Modern Textile and Apparel Dictionary, 1973, p.177.

Figure 1



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WARP DIRECTION

USCL METHOD 50-18 INDEX

TEXTILES - Methods And Procedures For The Analysis Of Silk

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

0 INTRODUCTION

The identification and analysis of silk is needed for proper tariff classification. The procedures discussed in this method involve instrumental analysis, polarized light microscopic techniques and observations. The analytical results are reported in accordance with the heading and subheading requirements of Chapter 50 of the Harmonized Tariff Schedule of the United States (HTSUS).

1 SCOPE AND FIELD OF APPLICATION

Chapter 50 of the Harmonized Tariff Schedule of the United States (HTSUS) requires the identification and quantitation of silk in textile materials. These analyses are performed using techniques, procedures and/or methods found in various reference methods from the International Standards Organization (ISO), the American Society for Testing Materials (ASTM), the American Association of Textile Chemist and Colorists (AATCC) and other technical references. The analytical results are recorded on a laboratory work sheet.

2 REFERENCES

Harmonized Tariff Schedule of the United States (HTSUS)
Section XI and, in particular, Chapter 50

ISO 139 - 1973(E)
Textiles - Standard atmospheres for conditioning and testing

USCL 51-01 ASTM D 1776
Conditioning Textiles for Testing

ISO 5089
Preparation of laboratory test samples and test specimens for chemical testing

ISO 5090
Textiles - Methods for the removal of non-fibrous matter prior to quantitative analysis of fibre mixtures

ISO 1833
Binary fibre mixtures - Quantitative chemical analysis

ISO 5088
Textiles - Ternary fibre mixtures - Quantitative chemical analysis

USCL 50-02 ASTM D 629
Standard Test Methods for Quantitative Analysis of Textiles, Section 23

USCL 50-01 AATCC 20
Fibre Analysis: Qualitative

USCL 50-03 AATCC 20A
Fibre Analysis: Quantitative

ISO 6989
Textiles - Determination of length and length distribution of staple fibres (by measurement of single fibres)

USCL 50-08 ASTM D 5103
Standard Test Method for Length and Length Distribution of Man-Made Staple Fibres (Single Fibre Test)

ISO 2060
Textiles - Yarn from packages - Determination of linear density (mass per unit length) - Skein method

USCL 51-10 ASTM D 1907
Standard Test Method for Yarn Number by the Skein Method

ISO 2061,
Textiles - Determination of twist in yarns - Direct counting method

ASTM D 1423
Standard Test Methods for Twist in Yarns by the Direct-Counting Method

ISO 3932,
Textiles - Woven fabrics - Measurement of width of pieces

USCL 50-13 ASTM D 3774
Standard Test Methods for Width of Woven Fabrics

ISO 7211.2
Textiles - Woven fabrics - construction - Methods of analysis - Part 2: Determination of number of threads per unit area

USCL 50-14 ASTM D 3775
Standard Test Methods for Fabric Count of Woven Fabric

ISO 3572
Textiles - Weaves - Definitions of general terms and basic weaves

USCL 50-17
Method for Weave Type Determination

3 PRINCIPLE

This method lists reference methods which can be used for the identification and quantitation of silk in all textile materials.

4 APPARATUS

4.1 Polarizing microscope comprising a light source, a light condenser, a stage which supports the slide carrying the fibers, an ocular, and objectives. A first order red plate is desirable.

4.1.1 Stage, movable in two directions at right angles by means of a sliding mechanism capable of successive displacements in 0.5 mm steps.

4.1.2 Objective and ocular, capable of providing at least 100 X magnification.

4.2 Suitable mounting medium

4.3 Cover-glass slips

4.4 Known silk standards

4.5 Precision balance, with a range up to 100 grams and accurate to at least 0.1 grams

4.6 Analytical balance, accurate to 0.1 milligram

5 CONDITIONING AND TESTING ATMOSPHERE

The atmosphere for conditioning and testing shall be the standards specified in Part IV of the General Explanatory Notes of the HS. Follow the procedures specified in ISO 139 or ASTM D 1776, Section 7, to reach the standard temperate atmosphere for conditioning and testing.

6 PROCEDURE

6.1 General: for all HS headings and subheadings

6.1.1 Consult the Harmonized Commodity Description and Coding System Explanatory Notes for a description of the goods covered by the headings and subheadings.

6.1.2 A visual and microscopic

examination plus a comparison with known standards is recommended to ensure that the product contains silk.

6.1.3 Use ISO 5090, Section 9.1 of AATCC 20A, or Section 9 of ASTM D 629 to remove any non-fibrous materials before conducting any quantitative analysis.[5]

6.1.4 Use ISO 1833, ISO 5088, AATCC 20A or ASTM D 629 to determine the percent silk when the silk is mixed with other fibres.

6.2 Silk worm cocoons suitable for reeling (HS 50.01)

6.2.1 Refer to the general procedures in 6.1 for identification and composition.

6.3 Raw silk (not thrown) (HS 50.02)

6.3.1 Refer to the general procedures in 6.1 for identification and composition.

6.3.3 Use ISO 2061 or ASTM D 1423 to ensure that the raw silk has not been thrown (twisted).

6.4 Silk waste (including cocoons unsuitable for reeling, yarn waste and garnetted stock) (HS 50.03)

6.4.1 Refer to the general procedures in 6.1 for identification and composition.

6.4.2 Use ISO 6989 or ASTM D 5103 to assist in determining if the sample has been carded or combed.

6.5 Silk yarn (other than yarn spun from silk waste) not put up for retail sale (HS 50.04)

6.5.1 Refer to the general procedures in 6.1 for identification and composition to confirm that silk predominates over any other textile material.

6.5.2 Use ISO 6989 or ASTM D 5103 to ensure that the yarns are silk filaments, i.e., continuous, and not silk waste. If the silk in the yarn is composed of both waste

[5] Pro-rate the weight of the removed sizings or dressings back to the calculated percentage of clean fibres to determine the fibre content as described by General Note (1) (A) (5) to Section XI of the Harmonized Commodity Description and Coding System Explanatory Notes.

and filaments, manually separate the waste from the filaments and determine their relative percentages by weight.

6.5.3 Use ISO 2060 or ASTM D 1907 to determine the decitex of the yarns. The yarns must have a decitex of 20,000 or less.

6.5.4 If it is suspected that the yarns could be "put up for retail sale", determine the mass of the sample. Use an analytical balance accurate to 0.1 g.

6.6 Yarn spun from silk waste, not put up for retail sale (HS 50.05)

6.6.1 Refer to the general procedures in 6.1 for identification and composition to confirm that silk predominates over any other textile material.

6.6.2 Use ISO 6989 or ASTM D 5103 to ensure that the yarns are silk waste, i.e., discontinuous, and not silk filaments. If the silk in the yarn is composed of both waste and filaments, manually separate the waste from the filaments and determine their relative percentages by weight.

6.6.3 Use ISO 2060 or ASTM D 1907 to confirm that the decitex of the yarns is less than 20,000.

6.6.4 If it is suspected that the yarns could be "put up for retail sale", determine the mass of the sample. Use an analytical balance accurate to 0.1 g.

6.7 Silk yarn and yarn spun from silk waste, put up for retail sale; silk-worm gut (HS 50.06)

6.7.1 Refer to the general procedures in 6.1 for identification and composition to confirm that silk predominates over any other textile material.

6.7.2 Use ISO 2060 or ASTM D 1907 to determine the decitex of the yarns. The yarns must have a decitex of 20,000 or less.

6.7.3 Determine the mass of the sample. Use an analytical balance accurate to 0.1 g.

6.7.4 Silkworm gut should be compared to a known sample of silkworm gut.

6.8 Woven fabrics of silk or of silk waste

6.8.1 Refer to the general procedures in 6.1 for identification and composition to confirm that silk predominates over any other textile material.

6.8.2 Use ISO 6989 or ASTM D 5103 to determine whether the yarns are silk filaments, i.e., continuous, or silk waste, i.e., discontinuous. If the silk in the yarn is composed of both waste and filaments, manually separate the waste from the filaments and determine their relative percentages by weight.

6.8.3 Use ISO 3932 or ASTM D 3774 to determine the width of the woven fabric.

6.8.4 Use ISO 7211.2 or ASTM 3775 to determine the number of warp yarns per centimeter.

6.8.5 Use USCL 50-17 to determine if the fabric is jacquard woven.

7 NOTES ON PROCEDURE

7.1 To determine whether silk yarn is "put up for retail sale", consult Note 4 to Section XI of the Explanatory Notes to the HTS.

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-19

Index

ISO 2076 - 1989
NHM - 1989
Textiles - Man-made Fibres - Generic Names

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method covers designations and specifications of different categories of man-made fibers.

This method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 2076 - 1989
NHM - 1989
Textiles - Man-made Fibres - Generic Names

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-20 Index

ISO 6938 - 1984
NHM - 1984
Textiles - Natural Fibres - Generic Names and Definitions

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method covers designations and specifications for different categories of natural fibers.

This method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 6938 - 1984
NHM - 1984
Textiles - Natural Fibres - Generic Names and Definitions

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-21

Index

ISO 3572 - 1976
NHM - 1976
Textiles - Weaves - Definitions of General Terms and Basic Weaves

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method defines general terms for describing woven constructions (weaves) and characterizes the three basic woven structures (weaves).

The determination of type of weave is required for classification in Chapters 50, 52, 53, 54, 55 and 58 of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 3572 - 1976
NHM - 1976
Textiles - Weaves - Definitions of General Terms and Basic Weaves

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-22

Index

ISO 2947 - 1973
NHM - 1973
Textiles - Integrated Conversion Table for Replacing Traditional Yarn Numbers by Rounded Values in the Tex System

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The tex number indicating yarn size is needed for classification of items in Chapters 50, 51, 52, 53, 54, 55, 56, 59, 60, 61 and 70 of the Harmonized Tariff Schedule of the United States (HTSUS).

This method is suitable for use in converting other yarn numbering systems to tex.

2 REFERENCES

ISO 2947 - 1973
NHM - 1973
Textiles - Integrated Conversion Table for Replacing Traditional Yarn Numbers by Rounded Values in the Tex System

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-23

Index

ISO 139 - 1973
NHM - 1973
Textiles - Standard Atmospheres for Conditioning and Testing

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method sets forth specifications for a standard temperature and atmosphere. All items in Section XI of the Harmonized Tariff Schedule of the United States (HTSUS) are subject to testing under these conditions.

2 REFERENCES

ISO 139 - 1973
NHM - 1973
Textiles - Standard Atmospheres for Conditioning and Testing

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-24 Index

ISO 5089 - 1977
NHM - 1977
Textiles - Preparation of Laboratory Test Samples and Test Specimens for Chemical Testing

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Laboratory sampling and subsampling of textiles are addressed in this method.

The method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 5089 - 1977
NHM - 1977
Textiles - Preparation of La boratoary Test Samples and Test Specimens for Chemical Testing

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-25 Index

ISO/TR 5090 - 1977
NHM - 1977
Textiles - Methods for the Removal of Non-fibrous Matter Prior to Quantitative Analysis of Fibre Mixtures

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method addresses the chemical removal of non-fibrous matter from textile commodities.

This method is suitable for Section XI and Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO/TR 5090 - 1977
NHM - 1977
Textiles - Methods for the Removal of Non-fibrous Matter Prior to Quantitative Analysis of Fibre Mixtures

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-26

Index

ISO 5088 - 1976
NHM - 1976
Textiles - Ternary Fibre Mixtures - Quantitative Anlaysis

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method is specific for procedures to determine, by chemical means, the quantities of textile fibers in ternary fiber blends/mixtures.

This method is suitable for Section XI and for Chapters 64, 65 and 67 of Section XII of the Harmonized Tariff Schedule of the Unites States (HTSUS).

2 REFERENCES

ISO 5088 - 1976
NHM - 1976
Textiles - Ternary Fibre Mixtures - Quantitative Analysis

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-27

Index

ISO 1144 - 1973
NHM - 1973
Textiles - Universal System for Designating Linear Density (Tex System)

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method offers an explanation of the Tex system which is used to size fibers, yarn intermediates (tow), yarns and cordage.

Tex terminology is used in Chapters 50, 51, 52, 53, 54, 55, 56, 59, 60, 61 and 70 of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 1144 - 1973
NHM - 1973
Textiles - Universal System for Designating Linear Density (Tex System)

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-28

Index

ASTM D 2497- 1995
NHM - 1995
Tolerance for Man-Made, Organic-Base Filament Single Yarns

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method covers tolerance guidelines for allowable variances within first quality man-made fiber yarns.

Chapters 54, 55 and 56 of the Harmonized Tariff Schedule of the United States (HTSUS) cover cordage, yarns and waste of man-made fibers.

2 REFERENCES

ASTM D 2497 - 1995
NHM - 1995
Tolerance for Man-Made, Organic-Base Filament Single Yarns

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-29 Index

ASTM D 861- 1995
NHM - 1995
Practice for Use of the Tex System to Designate Linear Density of Fibers, Yarn Intermediates and Yarns

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method offers an explanation of the Tex system which is used to size fibers, yarn intermediates (tow), yarns and cordage.

Tex terminology is used in Chapters 50, 51, 52, 53, 54, 55, 56, 59, 60, 61 and 70 of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ASTM D 861 - 1995
NHM - 1995
Practice for Use of the Tex System to Designate Linear Density of Fibers, Yarn Intermediates and Yarns

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-30

Index

ISO 1973 - 1976
NHM - 1976
Textiles - Determination of Linear Density of Fibres - Gravimetric Method

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Fiber size is needed for classification of fibers in Chapters 54 and 55 of Section XI and Chapter 70 of the Harmonized Tariff Schedule of the United States (HTSUS).

This is one method which is used to determine the size of untextured fibers.

2 REFERENCES

ISO 1973 - 1976
NHM - 1976
Textiles - Determination of Linear Density of Fibres - Gravimetric Method

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-31

Index

ISO 2060 - 1994
NHM - 1994
Textiles - Yarn from Packages - Determination of Linear Density (mass per unit length) by the Skein Method

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method is used to calculate the size of a yarn by the skein method.

This information is needed for the classification of yarns in Chapters 50, 51, 52, 53, 54, 55 and 56 of Section XI of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 2060 - 1994
NHM - 1994
Textiles - Yarn from Packages - Determination of Linear Density (mass per nit length) by the Skein Method

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-32 Index

ISO 2062 - 1993
NHM - 1993
Textiles - Yarn from Packages - Determination of Single-End Breaking Force and Elongation at Break

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method is specific for determining the breaking force of yarns.

The method is suitable for Chapters 54 and 59 of Section XI of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 2062 - 1993
NHM - 1993
Textiles - Yarn from Packages - Determination of Single-End Breaking Force and Elongation at Break

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-32 Index

ISO 2062 - 1993
NHM - 1993
Textiles - Yarn from Packages - Determination of Single-End Breaking Force and Elongation at Break

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method is specific for determining the breaking force of yarns.

The method is suitable for Chapters 54 and 59 of Section XI of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 2062 - 1993
NHM - 1993
Textiles - Yarn from Packages - Determination of Single-End Breaking Force and Elongation at Break

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-33

Index

ISO 5079 - 1977
NHM - 1977
Textiles - Man-Made Fibres - Determination of Breaking Strength and Elongation of Individual Fibres

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method is one used to determine the breaking strength of individual fibers.

High tenacity monofilament is classified in Chapter 54 of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ISO 5079 - 1977
NHM - 1977
Textiles - Mand-Made Fibres - Determination of breaking Strength and Elongation of Individual Fibres

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-34

Index

ASTM D 3822- 1995
NHM - 1995
Test Method for Tensile Properties of Single Textile Fibres

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method is one used to determine the breaking strength of individual fibers.

High tenacity monofilament is classified in Chapter 54 of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ASTM D 3822-1995
NHM - 1995
Test Method for Tensile Properties of Single Textile Fibres

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-35

Index

ASTM D 2101- 1995
NHM - 1995
Test Method for Tensile Properties of Single Man-Made Textile Fibres Taken From Yarns and Tows

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

This method is used to determine the tensile properties of man-made fibers removed from yarn intermediates (tow) and yarns.

Classification of tow and yarns of man-made staple fibers is in Chapter 55 of Section XI of the Harmonized Tariff Schedule of the United States (HTSUS).

2 REFERENCES

ASTM D 2101 - 1995
NHM - 1995
Test Method for Tensile Properties of Single Man-Made Textile Fibres Taken From Yarns and Tow

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-36 Index

ISO 3932 - 1976
NHM - 1976
Textiles - Woven Fabrics - Measurement of Width of Pieces

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The width of a woven fabric is required for classification in Chapters 50, 51, 52, 53, 54, 55, 58 and 59 of the Harmonized Tariff Schedule of the United States (HTSUS).

This method is one which can be used to determine the width of a woven fabric.

2 REFERENCES

ISO 3932 - 1976
NHM - 1976
Textiles - Woven Fabrics - Measurement of Width of Pieces

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-37 Index

ASTM D 3774- 1989
NHM - 1989
Test Methods for Width of Woven Fabric

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The width of a woven fabric is required for classification in Chapters 50, 51, 52, 53, 54, 55, 58 and 59 of the Harmonized Tariff Schedule of the United States (HTSUS).

This method is one which can be used to determine the width of a woven fabric.

2 REFERENCES

ASTM D 3774 - 1989
NHM - 1989
Test Methods for Width of Woven Fabric

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-38

Index

ISO 3933 - 1976
NHM - 1976
Textiles - Woven Fabrics - Measurement of Length in Pieces

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

Measurement of the length of woven blankets is needed for classification in Chapter 63 of Section XI of the Harmonized Tariff Schedule of the United States (HTSUS).

This method is one which can be used to determine the length of a woven fabric/blanket.

2 REFERENCES

ISO 3933 - 1976
NHM - 1976
Textiles - Woven Fabrics - Measurement of Length in Pieces

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-39

Index

ISO 3801 - 1977
NHM - 1977
Textiles - Woven Fabrics - Determination of Mass per Unit Length and Mass per Unit Area

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The following reference contains procedures which should prove useful in the determination of a) the mass per unit length, and b) the mass per unit area of woven fabric that have been conditioned in the standard atmosphere for testing. This list is being provided for general guidance and should not be considered exhaustive.

2 REFERENCES

ISO 3801 - 1977
NHM - 1977
Textiles - Woven Fabrics - Determination of Mass per Unit Length and Mass per Unit Area

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-40 Index

ISO 7211-2 - 1984
NHM - 1984
Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 2: Determination of Number of Threads per Unit Length

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The following reference contains procedures which should prove useful in the determination of the number of threads per unit length in woven fabric. This list is being provided for general guidance and should not be considered exhaustive.

2 REFERENCES

ISO 7211-2 - 1984
NHM - 1984
Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 2: Determination of Number of Threads per Unit Length

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-41

Index

ISO 7211-6 - 1984
NHM - 1984
Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 6: Determination of the Mass of Warp and Weft per Unit Area of Fabric

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The following reference contains procedures which should prove useful in the determination of the number of threads per unit length in woven fabric. This list is being provided for general guidance and should not be considered exhaustive.

2 REFERENCES

ISO 7211-6 - 1984
NHM - 1984
Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 6: Determination of the Mass of Warp and Weft per Unit Area of Fabric

U.S. CUSTOMS LABORATORY METHODS

USCL METHOD 50-42

Index

ISO 7211-1 - 1984
NHM - 1984
Textiles - Woven Fabrics - Construction - Methods of Analysis - Part 1: Methods for the Presentation of a Weave Diagram and Plans for Drafting, Denting and Lifting

Construction - Methods of Analysis - Part 1: Methods for the Presentation of a weave Diagram and Plans for Drafting, Denting and Lifting

SAFETY PRECAUTIONS

This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.

1 SCOPE AND FIELD OF APPLICATION

The following reference contains procedures which should prove useful in the recording of fabric weaves. Provisions are made for showing the sequence in which yarns of different character are related to the weave repeat and for the presentation of the warp and the weft yarn arrangement. This list is being provided for general guidance and should not be considered exhaustive.

2 REFERENCES

ISO 7211-1 - 1984

NHM - 1984
Textiles - Woven Fabrics -